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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/442,835	11/18/1999	YOSHIRO UDAGAWA	1232-4599	6443

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EXAMINER

WU, DOROTHY

ART UNIT	PAPER NUMBER
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2697

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/442,835

Applicant(s)

UDAGAWA, YOSHIRO

Examiner

Dorothy Wu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The specification is objected to. The specification uses the word “mode” to describe different operating scenarios wherein the display is on or off and the strobe is on or off. However, the claims use the word “mode” to indicate a step within an operating sequence, i.e. the second mode controls white balance information using information obtained in the first and second mode. Using the word “mode” with different meanings renders the specification unclear. Correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 9-13, 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki, U.S. Patent 5,691,772, in view of Kutaragi, U.S. Patent 4,584,598.

Regarding claim 1, Suzuki teaches an image pickup apparatus comprising: image pickup means (imaging unit **403**) for picking up an image of an object (col. 1, lines 17-19); operation means (photographing button) for operating an image pickup timing for image picking up the object to be recorded (col. 6, lines 56-65); white balance control means (control unit **110**), having a first mode of acquiring information about white balance in accordance with first operation (half

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depression of photographic button) by said operation means (col. 5, line 58-col. 6, line 52) and executing image pickup operation of said image pickup means in accordance with second operation at a timing after the first operation timing (col. 6, lines 56-65).

Suzuki does not teach a second mode of acquiring information about white balance in accordance with the second operation, for controlling white balance of an image picked up in accordance with the second operation on the basis of the information about white balance which are obtained in the first and second modes. Kutaragi teaches that when the electronic flash unit 36 is used during image capture, the previously determined white balance information is overridden by white balance in accord with the spectrum of the electronic flash unit, which reads on controlling white balance in accordance with information obtained in the first and second modes (col. 6, lines 16-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the adjustment made for flash taught by Kutaragi into the white balance apparatus taught by Suzuki to make an apparatus that utilizes information gathered during the first and second modes to effect white balance control. One of ordinary skill would have been motivated to make such a modification to achieve higher accuracy in white balance by adjusting for more variables.

Regarding claims 9 and 17, because the apparatus according to the limitations of claim 1 is taught, the method and program corresponding to the apparatus are also taught.

Regarding claim 2, Kutaragi teaches that the image data is displayed on a monitor (col. 1, lines 20-22), which reads on an apparatus that further comprises display means wherein said white balance control means controls white balance of the image displayed on said display

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means and information about white balance acquired in the first mode uses information about the white balance of the image displayed.

Regarding claims 10 and 18, because the apparatus according to the limitations of claim 2 is taught, the method and program corresponding to the apparatus are also taught.

Regarding claim 3, Suzuki teaches that color measurement unit **130** measures color aspects of the scene being imaged (col. 5, lines 31-35), and when the photographic button is half depressed, the gain corresponding to the results of the color measurement unit **130** is determined (col. 5, lines 58-61; col. 6, lines 4-8), which reads on the computation of information about white balance in the first mode on the basis of the image picked up at the first operating timing.

Regarding claims 11 and 19, because the apparatus according to the limitations of claim 3 is taught, the method and program corresponding to the apparatus are also taught.

Regarding claim 4, Kutaragi teaches that the image data is displayed on a monitor (col. 1, lines 20-22). Suzuki teaches that color measurement unit **130** measures color aspects of the scene being imaged (col. 5, lines 31-35), and when the photographic button is half depressed, the gain corresponding to the results of the color measurement unit **130** is determined (col. 5, lines 58-61; col. 6, lines 4-8), which reads on the white balance control means using information about white balance used for controlling white balance of the displayed image at the first operation timing, as information about white balance in the first mode.

Regarding claims 12 and 20, because the apparatus according to the limitations of claim 4 is taught, the method and program corresponding to the apparatus are also taught.

Regarding claim 5, Kutagari teaches that when captured digital data is analyzed to determine that the environment is too dark to take a picture, the electronic flash unit is enabled

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and white balance correction corresponding to the electronic flash unit is set (col. 7, lines 7-45), which reads on the white balance control means acquiring information about white balance in the second mode on the basis of the image picked up in accordance with the second operation.

Regarding claims 13 and 21, because the apparatus according to the limitations of claim 5 is taught, the method and program corresponding to the apparatus are also taught.

3. Claims 6-8, 14-16, 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki, U.S. Patent 5,691,772, in view of Kutaragi, U.S. Patent 4,584,598, and further in view of Okino, U.S. Patent 5,617,139.

Regarding claim 6, Suzuki in view of Kutaragi teaches the apparatus according to the limitations of claim 1. See above. Kutaragi teaches a strobe means (electronic flash unit 36) for illuminating an object (col. 6, lines 25-26); and storage means for storing information about white balance when said strobe means illuminates the object (col. 6, lines 34-41). Suzuki in view of Kutaragi do not teach that said white balance control means computes information about white balance of the image picked up in accordance with the second operation by using a white balance coefficient, as an initial value, which is obtained on the basis of information about white balance acquired on the basis of the first operation and information about white balance stored in said storage means, when said white balance control means causes said strobe means to illuminate the object in the first mode. Okino teaches that the color temperatures of ambient light and the strobe are average to achieve white balance (col. 4, line 66-col. 5, line 2), which reads on computing information about white balance by using a white balance coefficient obtained on the basis of the first operation and information about white balance stored in said storage means. Therefore, it

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would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the practice of averaging color temperatures taught by Okino with the apparatus taught by Suzuki in view of Kutaragi to make an apparatus that averages color temperatures when the flash is emitted. One of ordinary skill would have been motivated to make such a modification to produce a white color balance apparatus that better accounts for sources of light.

Regarding claims 14 and 22, because the apparatus according to the limitations of claim 6 is taught, the method and program corresponding to the apparatus are also taught.

Regarding claim 7, Okino teaches that the color temperatures of ambient light and the strobe are average to achieve white balance (col. 4, line 66-col. 5, line 2), which reads on said white balance control means controlling white balance on the basis of a white balance coefficient computed on the basis of computed information about white balance and information about white balance stored in said storage means.

Regarding claims 15 and 23, because the apparatus according to the limitations of claim 7 is taught, the method and program corresponding to the apparatus are also taught.

Regarding claim 8, Okino teaches that the color temperatures of ambient light and the strobe are average to achieve white balance (col. 4, line 66-col. 5, line 2), which reads on said white balance control means controlling white balance on the basis of information about white balance acquired in the second mode and information about white balance stored in said storage means, when said white balance control means causes strobe means to illuminate the object in the second mode.

Regarding claims 16 and 24, because the apparatus according to the limitations of claim 8 is taught, the method and program corresponding to the apparatus are also taught.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dorothy Wu whose telephone number is 703-305-8412. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on 703-308-9644.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231

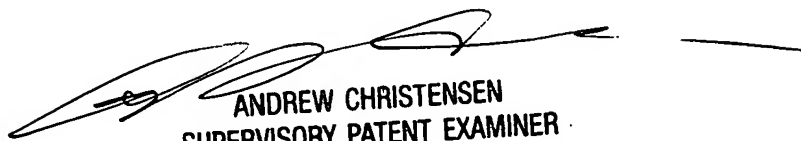
Or faxed to:

703-872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-306-0377.

Dorothy Wu
DW
July 25, 2003


ANDREW CHRISTENSEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600